DOCUMENT RESUME

ED 350 292 SP 034 102

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TITLE Applications of a Case Study Text to Undergraduate Teacher Preparation.
PUB DATE Jun 92
NOTE 13p.; Paper presented at the International Conference of the World Association for Case Method Research and Application (9th, Limerick, Ireland, June 21-24, 1992).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Case Studies; Course Content; Course Descriptions; *Decision Making Skills; Education Majors; Higher Education; *Learning Theories; Personal Narratives; Perspective Taking; *Preservice Teacher Education; *Problem Solving; *Theory Practice Relationship; *Thinking Skills
IDENTIFIERS Blooms Taxonomy; *Case Method (Teaching Technique); Vignettes

ABSTRACT

The case study method refers to a descriptive research document based on a real-life situation, problem, or incident. Cases describe situations calling for analysis, planning, decision-making, and/or action. The method requires that every attempt be made to provide an unbiased, multidimensional perspective in presenting the case and arriving at solutions. This paper offers one example of how the case study method was applied for the purpose of enhancing preservice teachers' decision-making abilities in an undergraduate teacher preparation course. A selected case study text was integrated with a learning theory text in a sophomore-level educational psychology course. Students (N=17) were provided with vignettes of teaching dilemmas and challenged to apply a variety of educational theories to possible solutions, thereby reinforcing the connection between theory and practice. Students discovered that the case study method was also a powerful vehicle for communicating their own personal experiences and concerns about teaching. The document explores case study implementation, professor perspectives, student perspectives, and applications to Bloom's taxonomy. (LL)

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# APPLICATIONS OF A CASE STUDY TEXT TO UNDERGRADUATE TEACHER PREPARATION

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Paper presented at the Ninth International Conference

World Association for Case Method Research and Application

University of Limerick, Ireland

June 21-24, 1992

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# APPLICATONS OF A CASE STUDY TEXT TO UNDERGRADUATE TEACHER PREPARATION

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**Abstract**

This paper offers one example of how the case study method was applied in the United States for the purpose of enhancing preservice teachers' decision-making abilities in an undergraduate teacher preparation course. A selected case study text was integrated with a learning theory text in a sophomore-level educational psychology course. Students were provided with vignettes of teaching dilemmas and challenged to apply a variety of educational theories to possible solutions, thereby reinforcing the connection between theory and practice. Students discovered that the case study method was also a powerful vehicle for communicating their own personal experiences and concerns about teaching.

## INTRODUCTION

The case study method as a means to reform and upgrade teacher preparation programs in the United States appears to be embraced enthusiastically, if cautiously, by leading teacher educators [Doyle, 1990; Harrington, 1990-1; Grant, 1992; Grossman, 1992; L. Shulman; 1992]. A case study, according to Merseth [1990], refers to a descriptive research document based on a real-life situation, problem, or incident. Cases describe situations calling for analysis, planning, decision-making and/or action. The method requires that every attempt be made to provide an unbiased multidimensional perspective in presenting the case and arriving at solutions.

## BENEFITS

Case studies in teacher education present a variety of problems and dilemmas that frequently confront the novice teacher. This connection to the "real world" of teaching provides preservice teachers with opportunities beyond their field placement experiences to carefully reflect and critically analyze teaching incidents and to develop schemas appropriate for future classroom practice [Henson, 1988]. Case studies have

also been used to enrich students' field experiences by preparing them to observe and analyze teaching events in their field placements [Florio-Ruane and Clark, 1990].

An additional benefit of using the case study method is its responsiveness to the individual perspectives of teachers-in-training. The professor can draw out preservice teachers' previous experiences and attitudes in response to an issue and model a variety of decision-making strategies. This provides preservice teachers with opportunities to see other points of view and/or solutions and enhance their problem-solving skills. This process also promotes ethical and moral reasoning through class discussions [Harrington, 1990-91].

## APPLICATIONS

A limited sampling of teacher preparation institutions suggests that the use of the case method is on the rise [White and McNergney, 1991] and that applications range from reading cases to writing cases, both in the classroom as well as in the field. Cases serve a variety of purposes: to illustrate examples of teaching practice, promote decision-making and problem-solving skills, or for knowledge and understanding [Doyle, 1990]. The case study approach has been suggested as a promising qualitative method to evaluate teacher education students and programs [Geiger and Shugarman, 1988]. However, the quality, content, and efficacy of these applications in teacher education is largely unknown and much research is presently underway [see J. Shulman, 1992].

## CASE STUDY TEXTS

Case study texts seem to have recently burst on the scene. Several publishers, taking their cues from the literature, have responded quickly to the need for well-written examples of teaching dilemmas. These texts differ in variety, content, quality, complexity and theoretical or research orientation. All tell good stories but vary in appropriateness for teachers-in-training with limited field experiences.

Four case study texts were reviewed for applicability to undergraduate teacher preparation. Kowalski, Henson and Weaver's text [1990] presents 36 vignettes of 3-5 pages with a series of short questions and a list of suggested review articles at the conclusion of each dilemma. Silverman, Welty and Lyon [1992] focus on the case studies of 28 individual teachers and rely on the skill of the instructor to facilitate discussion and form questions. Both Kowalski et al. and Silverman et al. offer accompanying teacher's manuals. Russo's [1990] text offers 16 dilemmas that seem more administrative in nature and may be more appropriate for inservice rather than preservice teachers. A working knowledge of learning theory is necessary to answer the 10 or so questions at the conclusion of each case in Greenwood and Parkay [1989]. The text presents 30 incidents in setting and dialogue that could be role played or videotaped.

## PURPOSES OF THIS STUDY

This study will examine the difficulties and benefits that arise from the integration of a selected case study text with a theory text in an undergraduate teacher preparation course at a private university. There are five purposes for this exploratory paper:

1. To describe how the case study method is being applied in the United States for the purpose of enhancing preservice teachers' decision making abilities in an undergraduate teacher preparation course.
2. To illustrate how the use of a case study text can challenge preservice teachers to apply educational theories to vignettes of teaching dilemmas.
3. To offer examples of personal and professional benefits in using a case study text to illuminate course content as perceived by preservice teachers.
4. To assess the difficulties of applying this method in undergraduate teacher preparation.
5. To suggest the international possibilities for use of the case study method in the education of undergraduate teachers-in-training.

## COURSE SYLLABUS

### DESCRIPTION

**EDT 208: Teaching and Learning** is a second semester educational psychology course required of all preservice teachers The university catalogue describes the course as, "Study of the empirical principles of learning such as reinforcement, discovery, motivation, and transfer. Interpretations for appropriate generic teaching behaviors especially diagnosis, prescription, and evaluation. Clinical and field experience (10 and 20 hours). Prerequisite: **EDT 207: Child and Adolescent Development**. 3 semester hours."

### TEXTS

Greenwood and Parkay's [1989] Case Studies For Teacher Decision Making was the catalyst and centerpiece of this course and all content was arranged to support the solution of selected cases on a variety of levels: practical, theoretical, ethical, and emotional. The text offered 30 cases to solve from five different areas: curriculum, instruction, group motivation and discipline, pupil adjustment, and conditions of the work place. Cases were arranged according to dilemma and cross-referenced by a theory guide in Appendix B.

Schunk's [1991] Learning Theories: An Educational Perspective , a slender volume of 10 chapters , was the primary theory text. The cases required background on classical and operant conditioning, social learning theory, information processing, motivational processes, problem solving, and learning and instruction. The text was supplemented with handouts on corporal punishment, educational objectives, Bloom's cognitive taxonomy, and Kranthwohl's affective taxonomy.

Educational Psychology 90/91, a collection of contemporary educational psychology articles edited by Cauley, Linder and McMillan [1990], further supplemented course background and reference materials. Articles were drawn from development, learning, motivation and classroom management, exceptional children, and measurement and evaluation.

### ASSIGNMENTS

In addition to reading Learning Theories: An Educational Perspective and attending all classes, students were required to complete five assignments and 20

field experience hours. The field experience was concurrent with the course and students were placed in local schools to observe one teacher for two hours a week over a ten week period.

The first student assignment was to select an article from Educational Psychology 90/91 and prepare a typewritten critique. Each student then presented an oral summary of his/her article to the class. This assignment was to get students comfortable at speaking in front of their peers and to provide them with feedback on their written and oral communication skills. Additionally, it was to help identify resources to aid in solving their cases.

Assignment two was a written analysis of a case from Case Studies for Teacher Decision Making. All students were assigned "The Glory That Was Greece," a teaching dilemma focused on convincing a class of average ability ninth graders that there is some value in studying world history. Case questions related to motivational theory, observational learning, and the teacher's affective and cognitive learning objectives. Answers and perceptions were compared and contrasted. Brainstorming and problem-solving strategies were modeled and student creativity was encouraged.

The third assignment was also a written analysis and class discussion. All elementary education majors were assigned "Brett the Brat," in which a teacher struggles to handle a verbally and physically aggressive third grade boy. Secondary education majors solved "And If They Don't All Want to Learn?" In this case, a beginning social studies teacher in an inner-city school had the task of motivating disruptive eighth graders from low-income backgrounds. Again, these cases were discussed for practical solutions as well as learning theory explanations for behavior and teaching practices.

Next, each student selected a case from the text to diagnose and present to the class for analysis and discussion. The presentation format was flexible as long as the case dilemma and issues were clearly presented in in a 30 minute time period. Again, a written analysis of the case was required and students were evaluated on the quality of their presentation, their understanding of learning theory applications and their problem-solving ability.

The final assignment was a clinical observation of one child in the field placement. Each student selected one child to work with in a tutorial relationship. Information was gathered about that child's interests and activities as well as their academic achievement and learning difficulties. Children's identities were protected and pseudonyms were used. A seven to ten page typewritten description of the child academically, socially and motivationally was due at the end of the field placement.

## IMPLEMENTING CASES

Participants in this study were 17 students from the Honors/Scholar's Section of **EDT 208: Teaching and Learning,** a sophomore level educational psychology course taught at a medium-sized private midwestern university over the course of one semester. The first eight weeks of the semester were spent discussing and modeling the case study method, lecturing from the learning theory text, and reviewing related articles. The second half of the semester was spent presenting and solving cases from the cases study text, and, in some instances, writing case studies. Field placements were assigned by the fourth week of the course. All assignments and activities were "open book." Students could use any resources available to them; written documentation was required.

## PROFESSOR PERSPECTIVES

I chose to integrate a case study text in my learning theory class because I was concerned that students could memorize a traditional text, thus testing well without any real understanding of the applications of educational psychology to enlighten teaching practice. Additionally, I wanted students to become more adapt at higher order thinking and problem solving. This curriculum seemed particularly appropriate for this class of very capable students, who, I felt, could be motivated and challenged to extend themselves beyond the limitations of one text and the confines of class questions and assignments.

### Assumptions

I shared my assumptions about this course with students the first day of class. One of my assumptions was that these were motivated students capable of independent and creative thinking and research. Another one of my assumptions was that they knew much more about the processes of schooling then they realized from their own experiences and that they were going to intuitively use this knowledge in their future classrooms without necessarily considering other perspectives. My next assumption was that they would be sensitive to other points of view while leading and participating in class discussions and receptive to refining their thinking. My last assumption was that they would be challenged and motivated by the dilemmas in the case study text.

### Modeling and Mentoring

Modeling problem-solving strategies occurred throughout the semester. I encouraged students to start thinking of themselves as teachers instead of students in approaching problems. By way of introduction to the case study text, I reviewed the sample analyses of the case "Joe Defies Authority." I demonstrated through role play and rhetorical "What if..." questions that different theoretical positions would produce different interpretations and solutions to the same issue, noting these approaches and solutions may be equally as effective. Consideration was also given to the roles teachers, parents, students, and administrators play in bringing their unique perspectives to a dilemma.

Novice teachers tend to idealize solutions or to do what they have seen done.in classrooms. I wanted these students to understand their own theoretical positions on issues and to challenge themselves to find alternative solutions "to the way things have always been done." It was important to listen to students and have them listen to each other to develop sensitivity to different perspectives and encourage higher order thinking. Lastly, I wanted them to realize that problem solving is an inexact science and even the most carefully considered and well-intended decisions may have unanticipated and sometimes undesirable outcomes. That, too, is part of the learning process.

### A Teachable Moment

One event that occurred early in the semester may have had a significant impact on the direction of the course and student enthusiasm for the case study method. In the previous class, a student had given an oral report on Nelson's [1989] Phi Delta Kappan article, "Of Robins' Eggs, Teachers, and Education Reform." The thrust of the article was that teachers need to respond carefully to educational reform to ensure that

they promote exciting, meaningful and joyful teaching. "Like it or not," wrote Nelson, "we must create experiences that draw students in, and the world of young people will be better if we do [p. 11]. We discussed the implications of the article for teaching behaviors and wondered out loud how to excite students about learning and to recognize a teachable moment.

That discussion came full circle at the very next classroom meeting. The occasion was the morning after Operation Desert Storm was announced by the President of the United States on national television. Sleepy students woke up to find their country embroiled in a conflict in the Middle East . Solemn and anxious, they filed into class that morning and I suspended the planned lesson to facilitate a class discussion about these events. Students' views on politics, geography, religion, morality, history, literature, and culture all came into play. The richness of their collective experiences and perspectives emotionally engaged and impressed them. This was a teachable moment.

Students were questioned about what they would do if they were teachers. The last few minutes of class was spent delineating and summarizing the learning principles from curriculum, instruction, and motivation underlying our discussion. Finally, I posed a series of questions based on using this class as a case study: "Should teachers discuss recent news events in their classrooms, and, if so, under what circumstances?"; "What are the positive and negative consequences of using this approach?"; "How could the content of today's discussion be modified for elementary and secondary students?" ; "What teaching methodologies and activities would be appropriate for different age groups?" The class was over before we knew it. Although we did not have time to answer these questions, the connections between classroom events and the case study method to enlighten practice were no longer remote and unclear.

## STUDENT PERSPECTIVES

Frequently, preservice teachers feel absolutely bombarded by theories during their first two years of teacher preparation. Educational theory and philosophy courses, which are a major component of these years, play their part in overwhelming even the brightest and most diligent of students. While the teacher educator attempts to impart knowledge in a clear and concise manner, preservice teachers often lack the practical experience that enables them to make sense of educational theories. This struggle continues, often until student teaching, before connections are made between theoretical knowledge and real life experiences.

The case study method created a link which connected each student's knowledge of educational theories to their field experiences. In addition, the application of a case study text to this educational psychology course provided models of effective teaching strategies at each level of Bloom's Taxonomy, a cognitive taxonomy of educational objectives [Bloom, Englehart, Frost, Hill and Kranthwohl, 1956]. Throughout the semester, we progressed through the levels of knowledge, comprehension, application, analysis, synthesis and evaluation. This progression in this course illustrates how the application of a case study text created a bridge between theory and practice for the class while it demonstrated an effective teaching strategy.

Applications to Bloom's Taxonomy

The first level of Bloom's taxonomy refers to the acquisition of knowledge. We used three books in this course. The first was a compilation of educational psychology articles. The second was a theory text, and the third a case study text. The combination of the first two sources provided the students with a balance of time tested educational theories and knowledge of current issues in educational psychology. While knowledge is often considered the lowest level in the cognitive domain, it was a necessary requirement for our future case study assignments. Before we could attempt to understand educational theories, we had to become familiar with many educational trends. With this knowledge, we were ready to proceed with the next level, comprehension.

There is a great difference between knowing something and understanding it. Comprehension refers to the processing of information. To comprehend, a student must be able to recognize, restate and translate information. During our first experience with the case study text, Dr. Sudzina guided us through the sample case. This assistance helped us learn how to recognize and extract the hidden theoretical clues from issues in the case as she modeled problem solving techniques. Dr. Sudzina gave us positive feedback and challenged us to answer each other's questions. Realizing that we could help each other built our confidence. We restated and translated our observations of the case in lively class discussions. These discussions often triggered discussions about our concurrent field experiences and continued throughout the semester. Through them we made sense of the cases and began to see how our knowledge could be applied in our own experiences.

The learning process did not stop here. Next, we looked at the cases and answered follow-up questions. These questions gave us clues about which theories to look for and helped us develop problem solving strategies. Answering these questions forced us to apply our knowledge and comprehension. Each of us developed unique ways for solving the dilemmas presented, and the case study format provided a model for uniform evaluation.

At this point, the class had completed three case studies for evaluation and presented one to the class orally. Since we were nearing the end of the semester, it was time for our final assignment. In an attempt to further relate the course to our field experience, Dr. Sudzina asked us to do a clinical evaluation on one particular child from our field placement class. Surprisingly, several members of the class requested an alternative assignment. The alternate assignment was to write a case study about our own field experiences. Seven of 17 students chose this alternative.

In retrospect, I see that this request to write our own cases as demonstrating several things. First of all, it showed that using case studies helped us to apply what we had learned in class to our practical experiences. Secondly, it proved that we felt very comfortable with the case study format and found that it was an effective form of communication. Finally, it illustrated our understanding of course content and demonstrated that we could identify and rectify problems through the application of our knowledge. By writing these case studies, we felt empowered as future teachers.

With the execution of this assignment, we continued on our journey through Bloom's taxonomy. To write our own cases, we had to analyze the ones we had already encountered. As authors we had to delve deeper into the cases to discover the case framework. We often worked together to determine how educational theories could be hidden in dialogue and narrative. I personally noticed that my observation

skills in my field classroom were necessarily improved. I began watching and listening much closer than before because I assumed the role of a problem solver.

The next step of our assignment forced us to move on. Once we figured out how to write a case, we had to write the actual case. We synthesized our professional knowledge and experiences with the case study format. I found this effort more difficult than I originally expected. From the process, I discovered how difficult and essential it is distill an entire semester of information into a few pages. I learned to focus on a few particular problems, as an unfocused case study is just a nice story. Transferring my experience into a case study, I was required to be concise and coherent.

Finally, we reached the end of the semester and the highest level of Bloom's taxonomy: evaluation. By writing follow-up questions for our cases, we had to evaluate our own teaching and field experience. By applying, analyzing and synthesizing, we questioned our effect in our field placements and realized that we were exercising the problem solving techniques that are necessary in a good teacher. For the first time in my preparation program, I felt as though I could make a difference.

## OUTCOMES AND ANALYSIS

### PROFESSOR PERSPECTIVES

The students met and exceeded my expectations. Although the class was designated an Honors/Scholars section, there were a handful of students in the class who were not in in that program. All students demonstrated a grasp of theory and application in their written analyses and presentations. Student case presentations were creative and resourceful, ranging from skits and role-playing to testing and group activities. Academic effort, creativity, and individual talents were valued and reinforced. Students both challenged and supported each other in case discussions. A sense of community and personal responsibility for actions and outcomes developed among class members.

Although I did not consciously use Bloom's taxonomy to implement cases in this course, the fact that students used that framework to help them make sense out of the case study process is an affirmation that they were able to grasp theoretical perspectives and apply them to their own experiences.

Field experiences in the local schools were an integral part of process. All students had one previous field experience prior to their current placements. Without a field placement, it is questionable whether the request to write their own cases would have been forthcoming.

Seven of the seventeen students wrote their own cases and questions as a way to understand and formulate solutions to teaching situations that were less than ideal. This was an unexpected outcome. Five of these students had exposure to case studies in other classes.

One of the greatest difficulties with this method in undergraduate teacher preparation is time. There is much information to cover in an introductory learning theory course and applications often take a back seat to students' understanding and mastery of educational concepts. Case study texts and theory texts are difficult to integrate and coordinate in reinforcing theories with applications requiring problem solving skills. Large classes can make discussions difficult and fail to involve some students in these activities. Preservice teachers' limited educational perspectives and

experiences need to be considered when assigning cases. Field experiences were helpful to reinforce and extend the reality of these cases and offer preservice teachers a variety of settings in which to observe the craft of teaching. Without these experiences, cases may be interpreted simply as interesting stories.

## STUDENT PERSPECTIVES

The application of the case study method had a tremendous effect on the quality of education we received in this course. Besides learning about educational psychology, we learned about real life teaching techniques. The use of this method also challenged us cognitively. It forced us to assume the role of problem solver and empowered us to make sense of our field experiences. Creating our own case studies sharpened our observational skills and helped us apply this new knowledge to actual situations.

The time and effort we put into the analysis of case studies was not exerted entirely because we were going to be evaluated. Instead, we were also motivated by a conscientious desire to apply our skills and test our own abilities in the solving of typical classroom dilemmas. Because the class was enjoyable, and the activities pleasurable, we were also stimulated emotionally to learn and retain more knowledge [Skemp, 1978].

One of the most unexpected lessons we learned from this course was to trust each other and ourselves. The class discussions we had about each case revealed that our collective knowledge was was greater than any one individual point of view. Professional comraderie was established among class members as we gained appreciation for each other's unique experiential background and talents. I believe that this spirit of appreciation and teamwork will be every bit as important to us as future teachers as the knowledge we gained about major educational theories.

## SUMMARY AND RECOMMENDATIONS

Preservice teachers using a case study text strengthened connections between theoretical knowledge and classroom applications in an undergraduate educational psychology course The professor provided background information on educational learning theories and modeled problem-solving strategies with cases. Each student selected, analyzed, and presented a case for class discussion. Students discovered that the case study format not only increased their understanding and comprehension of issues and theories in educational psychology, but also served as a powerful vehicle for communicating their own personal experiences and concerns about teaching.

The case study method and the use of cases appear to have much promise for preparing future teachers for classroom situations which may be very different from the schooling that they have experienced and expect. Preservice teachers perceived that they were better able to assume "teacher" perspectives in solving a problem after going through the process. Additionally, they gained confidence in their own ability to seek out answers to problems instead of passively receiving the "correct" answer from the professor. They networked among themselves and saw each other a potential sources of information and support, behaviors effective teachers in schools cultivate.

The choice of a case study text can be critical to fulfilling course goals and objectives. The text selected melded educational theory to teacher decision making

and provided sample case study analyses and a theory guide for cross referencing cases. Students were required to apply their experiential knowledge and theoretical knowledge to vicarious teaching dilemmas. The questions served to guide their problem solving strategies and the classroom discussions.

An unexpected outcome was that seven out of the seventeen students elected to write their own case study of a teaching dilemma, rather than complete a clinical observation of a child in their field placement. The case study approach apparently allowed them to view teaching difficulties as potential case studies to solve, rather than as sources of dissatisfaction or disillusionment in their field experiences.

The method is not without its drawbacks. Large class sizes and student difficulty in mastering required content can work against effectively applying case studies in undergraduate teacher preparation. Time and preservice teachers' inexperience are also difficulties in individualizing instruction with cases. One solution would be to assign cases to small groups within the class and mentor groups instead of individual students. Videotaped and audiotaped cases could supplement written cases to further expand students' repertoire of vicarious teaching settings and dilemmas.

Future research in case studies offers a wealth of possibilities. One study could focus on the similarities and differences of typical teaching dilemmas in other cultures and educational systems. Additionally, an investigation of the state of the art of teacher training strategies with case studies in other countries would be enlightening. From a learning theory perspective, it would be interesting to compare the theoretical orientations and case study applications seen to have the most value for beginning teachers in other teacher training systems. What kinds of benefits does the application of the case study method offer for improving and rewriting teacher preparation curriculum in the United States and abroad? Finally, we need to look at strategies from other disciplines that can be applied to improve teacher training and teacher performance through the use of the case study method.

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